

A Comparison of the Frothing-Over in a Steam Boiler
With a Geyser Eruption, by S. A. Durov.

RUSSIAN, per, Zhur Prikl Khim, No 3, 1941, pp 368-371.

MLL N. 3028

Sci

Feb 62

186, 857

Zal'kind, Yu. and Khuskivadze, A.
PREPARATION OF DIBASIC ACIDS FROM OIL DIS-
TILLATES. [1961] 4p. 8 refs.
Order from OTS or SLA \$1.10

61-16881

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1941, v. 14, no. 3, p. 405-409.

DESCRIPTORS: *Kerosene, Oxidation, *Dibasic acids,
Synthesis, Adipic acid.

Experiments of oxidation of kerosene fractions with ni-
tric acid of specific gravity 1.4 are reported. The best
yield (12.26%) of dibasic acids was obtained from an oil
fraction boiling at 210-215°; of these, 6.12% consisted
of adipic acid. The yield of the latter increases in the
presence of vanadium pentoxide. Oxidation of decalin
with nitric acid gives glutaric and oxalic acids; when
other petroleum hydrocarbons are added, adipic acid
(Chemistry--Organic, TT, v. 6, no. 9) (over)

61-16881

I. Zal'kind, Yu.
II. Khuskivadze, A.

185401

Office of Technical Services

Balandin, A. A., Zelinskii, N. D. and others.
PREPARATION OF 1,3-BUTADIENE BY CATALYTIC
DEHYDROGENATION OF 1-BUTENE. [1961] 9p.
15 refs.

Order from OTS or SLA \$1.10

61-18011

Trans. of *Zhurnal Prikladnoi Khimii* (USSR) 1941,
v. 14, p. 435-445.

DESCRIPTORS: *Butadienes, Synthesis, *Butenes,
Dehydrogenation, Catalysis.

The catalytic dehydrogenation of 1-butene to 1,3-butadiene was investigated in the presence of carbon dioxide or nitrogen. The conditions were established under which butadiene is formed in yields of up to 34% on the passed, or 77% on the decomposed, butene. The reaction is carried out under atmospheric pressure, at 600°, with a contact period of 0.3 seconds and dilution of butene with carbon dioxide in the ratio of 1:7.5 by

(Chemistry--Organic, TT, v. 6, no. 7)

(over)

61-18011

I. Balandin, A. A.
II. Zelinskii, N. D.

Office of Technical Services

Rakovskii, E. V. and Burinova, O. A.
PRODUCTION OF HYDROGEN BY CONVERSION OF
HYDROCARBONS WITH STEAM. [1961] 17p. 13 refs.
Order from OTS or SLA \$1.60 61-16917

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941.
v. 14, p. 449-465.

DESCRIPTORS: *Hydrogen, Production, *Hydrocarbons,
Decomposition.

With the aid of catalysts composed of nickel and oxides
of heavy metals, an extent of conversion of lower
saturated and unsaturated aliphatic hydrocarbons can
be achieved corresponding to the theoretical limit.
The temperature of complete conversion of hydrocar-
bons with steam, including methane, does not exceed
750-800°. (Author)

(Chemistry--Organic, TT, v. 6, no. 7)

61-16917

I. Rakovskii, E. V.
II. Burinova, O. A.

Office of Technical Services

Kinetics of Oxidation of Ammonia by Air Enriched
with Oxygen, by V. I. Atroshchenko, E. G. Sedashova,
10 p.

RUSSIAN, per, Zhur Prik Khim, Vol XIV, 1941,
pp 500-506.

SIA

~~AKA~~ R-2959

Sci

Jul 59

92.383

Rutovskii, B. N. and Yakobson, N.
COPOLYMERIZATION OF METHYL ISOPROPENYL
KETONE AND METHYL METHACRYLATE. [1961]
7p, 6 refs.
Order from OTS or SLA \$1.10

61-18077

Condensed trans., of Zhurnal Prikladnoi Khimii (USSR)
1941, v. 14, no. 4/5, p. 528-538.

DESCRIPTORS: *Copolymerization, Ketones,
*Acrylic resins, *Polymers.

Experiments were carried out showing that copolymer
of methyl methacrylate and methyl isopropenyl ketone
can be prepared in which the monomers are equally
distributed through the individual fractions of the prod-
uct. In the absence of solvents, copolymers were ob-
tained with a content of the ketone amounting to 25 and
12.5%. In the presence of 50% ketone, no polymer is
formed. Copolymerization in solution gave copolymers
containing 50.25 and 12.5% ketone. The polymers pre-
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18077

I. Rutovskii, B. N.
N. Yakobson, N.

18077

Office of Technical Services

Rutovskii, B. N. and Goncharov, G. S.
COPOLYMERIZATION OF STYRENE WITH METHYL
ISOPROPENYL KETONE. [1961] 6p. 9 refs.
Order from OIS or SLA \$1.10 61-16887

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1941, v. 14, no. 4/5, p. 542-550.

DESCRIPTORS: *Copolymerization, *Styrenes,
Ketones, Polymers.

The method and conditions favoring copolymerization
were investigated on the example of styrene and methyl
isopropenyl ketone. Small amounts of methyl isopro-
penyl ketone accelerate polymerization of styrene in
emulsions, but additions exceeding 10% of the ketone
retard the process. Polymerization in emulsion in the
presence of benzoyl peroxide does not give copolymers,
while in the presence of hydrogen peroxide, conditions
may be created leading to its formation. Under favora-
ble conditions, copolymers are formed the chemical
(Chemistry-Organic, TT, v. 6, no. 7) (over)

61-16887

I. Rutovskii, B. N.
II. Goncharov, G. S.

736

Office of Technical Services

Pavlovich, P. I.
POLYMERIZATION OF VINYL CHLORIDE IN SOLUTIONS AND EMULSIONS, II. [1961] 10p. 20 refs.
Order from OTS or SLA \$1.10 61-16971

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941, v. 14, p. 555-558.

DESCRIPTORS: *Vinyl chlorides, *Polymerization, Polymers, Benzoyl radicals, Peroxides, Colloids, Stability, Benzaldehydes, Acetaldehydes, Acetic acids, Hydrogen compounds, Barium compounds, Catalysts, Solutions.

It was proved that benzoyl peroxide can be substituted for polymerization of vinyl chloride by hydrogen peroxide or barium peroxide and easily oxidizable substances, namely, benzaldehyde, acetaldehyde, acetic acid, acetic anhydride. Acetyl benzoyl peroxide gave (Chemistry--Organic, TT, v. 6, no. 10) (over)

61-16971

I. Pavlovich, P. I.

Office of Technical Services

A Study of the Effect of the Conditions of Formation
on the Physicomechanical Properties of Cellulose
Acetate Films, by A. A. Moiseyev, Z. A. Rogovin,
13 pp.

RUSSIAN, per, Zhur Prikl. Khim, Vol XIV, No 4/5,
1941, pp 579-585.

SLA 59-10728

Sci
Nov 59
Vol II, No 3

101, 535

Investigations in the Field of the Azo Dyes.
II. Soluble Forms of Insoluble Azo Dyes, by
V. N. Ufimtsev, 11 pp.

RUSSIAN, no per, Zhur Prik Khim, Vol XIV, No 4/5,
1941, pp 600-604.

NIH Tr 7-20

50,743

Sci - Chem
Aug 57

Klebanov, A. L. and Mironenko, G. I.
HIGH MOLECULAR PRODUCTS OF CONDENSATION
OF BENZENE WITH DICHLOROETHANE: METHOD
OF THEIR SYNTHESIS AND INVESTIGATION OF
THEIR COMPOSITION AND STRUCTURE. [1961] 12p.
21 refs.

Order from OTS or SLA \$1.60

61-16923

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 618-621.

DESCRIPTORS: Condensation reactions, *Benzenes,
Ethanes, *Chlorides, Synthesis.

Investigation of the condensation of benzene with di-
chloroethane established that the best yield, from 85 to
87% of theoretical, is obtained by using a proportion of
2.5 moles dichloroethane per mole benzene in the pres-
ence of 2.77% metallic aluminum on benzene. Techni-
cal dichloroethane is well refined by drying over cal-
cium chloride, treating with from 2 to 5% concentrated
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-16923

I. Klebanov, A. L.
II. Mironenko, G. I.

OTS 61-17231

101731

Office of Technical Services

Khankin, M. G. and Papok, K. K.
RAPID METHOD OF DETERMINATION OF TETRA-
ETHYL LEAD IN LEADED GASOLINES. [1961] 8p.
14 refs.

Order from OTS or SLA \$1.10

61-18038

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 652-661.

DESCRIPTORS: *Gasoline, Chemical analysis, *Lead
compounds, Ethyl radicals, Determination.

(Chemistry--Analytical, TT, v. 6, no. 7)

61-18038

1. Khankin, M. G.
2. Papok, K. K.

15177

Office of Technical Services

Belopol'skiy, A. P. and Shpunt, S. Ya.
THE SYSTEM $\text{FeSO}_4 - \text{H}_2\text{SO}_4 - \text{H}_2\text{O}$ AT 50-90° C.
Nov 50 [24]p. 28 refs. BISI-409; TL 734; [DSIR LLJ]
M 2070.
Order from OTS or SLA \$2.60

61-13427

Trans. of Zhurnal Prikladnoy Khimii (USSR) 1941,
v. 14, no. 6, p. 716-733.

DESCRIPTORS: *Iron compounds, *Sulfates, *Sulfuric
acid, Water, Temperature, *Phase studies *Solubility.

(Chemistry--Physical, TT, v. 6, no. 1)

61-13427

- I. Belopol'skiy, A. P.
- II. Shpunt, S. Ya.
- III. BISI-409
- IV. Trans-T/L-734
- V. DSIR LLJ M. 2070
- VI. British Iron and Steel
Industry Translation
Service

161668

Office of Technical Services

Zh Priklad Khim Vol 14, page 783-9 (1941)

Contact Surfaces of the Phases as the Main Factor of
Chlorination of Sodium Sulfate. by B. A. Kopylev and
L. P. Svyantnaya.

AEC Trans (avail. Brookhaven)

Kreshkov, A. P.
CHLORINATION OF METHANE IN THE PRESENCE
OF STEAM. [1961] pp. 24 refs.
Order from OTS or SLA \$1.10 61-18001

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 800-804.

DESCRIPTORS: *Methanes. *Chlorination, Chlorides,
Steam.

In interaction of chlorine with steam, oxygen is formed
by the reverse Deacon reaction and this nascent oxygen
retards the chlorination, as indicated by Pease and
Valz; furthermore, it oxidizes methane and the prod-
ucts of its chlorination. At high temperature in the
presence of catalysts, the chlorine derivatives of
methane formed in the course of chlorination are partly
hydrolyzed. Methane interacts with steam, carbon
dioxide and other reaction products. Contrary to the
statements by Roka, chlorination of methane in the
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18001

I. Kreshkov, A. P.

Office of Technical Services

Dmitsev, A. I., Tilicheev, M. D., and Frost, A. V.
KINETICS OF CRACKING HYDROCARBONS. [1961]

5p. 14 refs.

Order from OTS or SLA \$1.10

61-18000

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 805-808.

DESCRIPTORS: *Hydrocarbons, Decomposition,
Reaction kinetics.

(Engineering--Chemical, TT, v. 6, no. 7)

61-18000

I. Dmitsev, A. I.
II. Tilicheev, M. D.
III. Frost, A. V.

121765

Office of Technical Services

Methods for Synthesis of Acetylfluoride and
Its Derivatives. I. Fluoranhydrides of
Carbonic Acids, by A. I. Mashentsev, 20 pp.

RUSSIAN, no per, Zhur Prik Khim, Vol XIV,
No 6, 1941, pp 816-826.

Sci Tr Center
RT-2234

Scientific - Chemistry
CTB 70/Jul 55

25, 227

MARGOLIS, L. D.
OXIDATION OF TOLUENE TO BENZALDEHYDE.
[1961] pp. 18 refs.
Order from OTS or SLA \$1.10 61-18033

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 827-833.

* DESCRIPTORS: *Toluenes, Oxidation. *Benzaldehydes.
Electrolysis. *Electrochemistry.

Oxidation of toluene to benzaldehyde can be carried out
with oxidizing agents capable of electrolytic regenera-
tion. For this purpose a solution of manganese sulfate
in sulfuric acid of specific gravity 1.500 is suitable.
The oxidizing agent may be regenerated in an apparatus
with lead electrodes without a diaphragm. This may
easily be carried out under plant conditions. The opti-
mal conditions of oxidation of toluene and of regenera-
tion of the oxidizing agent are: (a) specific gravity of
sulfuric acid used for the bath, 1.500; (b) temperature
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18033

L. Margolis, L. D.

101170

Office of Technical Services

61-18033

Zabavin, V. I.
SUBSTANCES ISOLATED FROM PRIMARY TAR
WITH PETROLEUM ETHER, II. [1961] 8p. 6 refs.
Order from OTS or SLA \$1.10 61-16939

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1941,
v. 14, p. 849-855.

DESCRIPTORS: *Petroleum, *Tars, Decomposition,
Separation, Coal, Chemical reactions, Solubility,
Solvents.

A study of the substances insoluble in petroleum ether
and included in the composition of primary tars of
Cheremkhovo coal, Aleksandriya brown coal and
Kashpir shale revealed that these primary tar com-
ponents of the two coals constitute a mixture of sub-
stances of humic and resinous character. The humic
portion of Cheremkhovo coal tar is neutral in charac-
ter, while that from the Aleksandriya coal possesses
(Engineering--Chemical, TT, v. 6, no. 12) (over)

61-16939

I. Zabavin, V. I.

1961

Office of Technical Services

Equilibrium Diagram for the System CaO-SiO_2 , by
K. K. Kolobova, 17 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XIV, 1941, pp
928-938.

SLA R-2244

Sci

Aug 58

72,186

Klochko, M. A. and Medvedeva, Z. C.
USE OF PALLADIUM IN ELECTROLYTIC COATINGS.
23 Jan 46, 18p. (figs. tables refs. omitted).
Order from OTS or SLA \$1.60 62-20273

Trans. of [Zhurnal Prikladnoi Khimii] (USSR) 1942,
v. 15, no. 1/2, p. 25-46.
An abstract trans. is available from OTS or SLA \$1.10
in 61-20333 [1961] 4p.

DESCRIPTORS: *Palladium, *Electroplating, Coatings,
*Finishes, Palladium compounds.

Studies were made of the conditions for the securing of
lustrous and dense Pd deposits from palladous chloride
and chloro palladates of sodium, potassium and ammo-
nium, as well as from the solutions of the complex Pd
compounds containing the groups: NH_3 , PO_4 , NO_2 and
 Cn .
(Metallurgy, TT, v. 9, no. 9)

62-20273

I. Klochko, M. A.
II. Medvedeva, Z. C.

Office of Technical Services

Application of Electrochemical Methods for the
Production and Refining of Platinum Metals (a review,
by M. A. Klovko, Z. S. Medvedeva, 9 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XV, No 1/2, 1942,
pp 72-78.

STA 59-10605

Sta 59-10605
Sep 59
Vol 2, No 2

98, 005

61-20334

JOURNAL OF APPLIED CHEMISTRY, 1942, VOL. 15,
NO. 3: [TABLE OF CONTENTS] AND SELECTED
ABSTRACTS. [1961] 8p. 18 refs.

Order from OTS or SLA \$1.10

61-20334

Abstract trans. of Zhurnal Prikladnoi Khimii (USSR)
1942, v. 15, no. 3: p. 101-104, #128-130, 164-171,
175-181.

#Complete translations are available separately.

DESCRIPTORS: *Chemistry, *Bromine, Sources,
Catalysis, Dehydrogenation, *Butenes, Butadienes,
Reduction, Decomposition, *Cyclohexanes, High tem-
perature research, Catalysts, Metals, *Anthracenes,
Sulfonic acids, Solubility, Salts, *Fuels, Carboniza-
tion, Fluidized solids.

Contents:

Some new sources of bromine, by I. G. Druzhnin
(Chemistry, TT, v. 7, no. 1) (over)

I. Title: Solubility ...
II. Title: Carbon ...

Office of Technical Services

Balandin, A. A., Zelinskii, N. D. and others.

CATALYTIC DEHYDROGENATION OF BUTENE TO
BUTADIENE UNDER REDUCED PRESSURE. [1961]
11p. 15 refs.

Order from OTS or SLA \$1.60

61-16636

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1942,
v. 15, p. 128-138.

DESCRIPTORS: *Butadienes, Dehydrogenation,
*Butenes, Chromium catalysts.

Research on dehydrogenation of 1-butene to 1,3-butadiene was continued by employing a pressure of 180 mm and two chromium catalysts. The effect of the contact period and the temperature were systematically investigated. Occurrence of two consecutive reactions was established consisting in formation and decomposition of butadiene. The highest yield of butadiene was obtained at 592° and a rate of flow of 2,000 liters per liter catalyst per hour. This yield amounted to 29% on the (Chemistry--Organic, TT, v. 6, no. 6) (over)

61-16636

I. Balandin, A. A.
II. Zelinskii, N. D.

176561

Office of Technical Services

Balandin, A. A. and Kotelkov, N. Z.
DEHYDROGENATION AND DECOMPOSITION OF
CYCLOHEXANE AT HIGH TEMPERATURES OVER
METALLIC CATALYSTS. [1961] 14p. 19 refs.
Order from OTS or SLA \$1.60 61-16919

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1942,
v. 15, p. 139-150.

DESCRIPTORS: *Cyclohexanes, Dehydrogenation,
Decomposition, Catalysts.

Catalytic dehydrogenation and decomposition of cyclohexane was investigated at 300-600° over electrically heated coils of nichrome, platinized nichrome, palladized nichrome, iron and chromium-plated iron, using a specially constructed apparatus distinguished by a number of advantages over the conventional catalytic equipment. Kinetic data for these reactions were obtained and a hypothesis of dendritic deposition of carbon based on the multiplet theory of catalysis, is suggested as an explanation of the data obtained. (Author)

61-16919

I. Balandin, A. A.
II. Kotelkov, N. Z.

101121

Office of Technical Services
(Chemistry--Organic,
TT, v. 6, no. 7)

Shostakovskii, M. F. and Bogdanov, I. P.
POLYMERIZATION OF SIMPLE VINYL ETHERS. I.
VINYL BUTYL ETHER. [1963] [21p] (figs omitted)
10refs

Order from OTS or SLA \$2.60

63-20173

Trans. of [Zhurnal Prikladnoi Khimii] (USSR) 1942,
v. 15 [no. 4] p. 249-259.

Abstract trans. is available from OTS or SLA \$1.60
in 61-20335 [1961] 14p.

DESCRIPTORS: *Vinyl radicals, *Butyl radicals,
*Ethers, *Polymerization, Catalysts, *Iron catalysts,
Chlorides, Purification, Density, Refractive index,
Viscosity.

(Chemistry--Organic, TT, v. 10, no. 12)

63-20173

- I. Title: Vinyl Butyl ethers
- I. Shostakovskii, M. F.
- II. Bogdanov, I. P.
- III. Title: Vinyl . . .

Office of Technical Services

Synthesis and Properties of Aryl Vinyl Ethers, by
M. F. Shostakovskiy, M. S. Burmistrova, 11 pp.

RUSSIAN, no per, Zhur Prik Khim, Vol XV, No 4,
1942, pp 260-266.

Sci Tr Center RT 3601

Scientific - Chemistry

36,136

Jun 56 CTS

Decomposition of Phosphorites by a Mixture of
Sulfur Dioxide and Nitrogen Oxides, by G. A. Yakovkin,
15 pp.

RUSSIAN. per, Zhur Prikl Khim. Vol XV, 1942, pp
pp 275-289.

SLA R-2884

Sci

Jul 59

92,644

On Catalysts for the Reaction of Formation
of Carbon Bisulphide from Elements, by
L. Ya. Markovskiy, N. Khoroshkova,
UNCLASSIFIED

RUSSIAN, per, Zhur Prik Khim, Vol XV, No 5,
1942, pp 290-301, ~~-----~~

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~~Sci Doc Center~~

T. 654

20,548

Scientific - Chemistry Jan 55 CTS
Indian National Sci Doc Center, Natl Physical Lab
of India, Hillside Rd., New Delhi-12, India

Kuperman, G. M.
RECLAIMING SULFURIC ACID SLUDGES FORMED
IN OIL REFINING. [1961] 8p. 25 refs.
Order from OTS or SLA \$1.10 61-16648

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1942, v. 15, p. 319-330.

DESCRIPTORS: *Sulfuric acid, Separation,
*Petroleum, Oil, Processing, Recovery, Electrolysis.

It was established that sulfuric acid can be reclaimed
from acid sludge or black acid by electrolytic means.
The concentration of the obtained acid can be raised to
92% by evaporation before or after the electrolytic
treatment. The color of the finished acid is also quite
satisfactory, and when determined with a Duboscq
apparatus it ranges from 5.3 to 29.3 mm. Technical
sulfuric acid, the color of which was determined at the
plant to be 45.1 mm, showed a very small content of
(Engineering-Chemical, TT. v. 6, no. 7) (over)

61-16648

I. Kuperman, G. M.

181715

Office of Technical Services

Berkengelm, A. M. and Polunina, E. F.
EMULSIFYING LUBRICATING OILS WITH PRODUCTS
OF SULFONATION OF SHALE TAR. [1961] 6p.

4 refs.

Order from OTS or SLA \$1.10

61-18178

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943,
v. 16, p. 345-350.

DESCRIPTORS: *Lubrication, *Oils, Colloids,
Sulfonates.

Sodium salts of sulfonic acids prepared from shale tar fractions are a good emulsifier of lubricating oils. In comparison with naphthenesulfonic acids a considerably smaller amount of this agent is required. Preparation of concentrated emulsions can be effected at room temperature, which simplifies the manufacturing process. No alcohol is required for the preparation of an emulsion. The corrosion of steel is completely prevented by adding to the aqueous emulsion up to 0.55% sodium carbonate. (Author)

61-18178

I. Berkengelm, A. M.
II. Polunina, E. F.

Office of Technical Services

(Materials--Lubricants,
TT, v. 6, no. 7)

The Synthetic Rubber Industry During the Twenty-
Five Years of Soviet Power, by N. J. Smirnov,

RUSSIAN, for, Novy Khim, Vol XV, No 6, 1942,
pp 373-379.

RUSSIAN H.1600

SEE

171, 914

BOOK

6-6-61

Development of Methods of Plastics Production in
USSR, Dr. G. N. Ushakov.

RUSSETT, J. W., Int. J. Plast. Ind., Vol. 17, No. 6, 1961,
pp. 389-390.

DATA FILE H.1598

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111, 911

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Oct 61

Vapour Pressure of Sulphides of Antimony, Lead,
Cadmium, and Zinc, by B. K. Veselovski.

RUSSIAN, per, Zhur. Prikl. Khim., Vol 15, No 6, 1942,
422-435.

~~Sci Museum Lib~~ No 50/3539 - London

Sulphate Nitrophoska I. II. Polytherm of the
Reversible Reciprocal System of Sulphates and
Nitrates of Potassium and Ammonium, by I. N.
Nikonova and A. G. Bergman, 11 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XV, 1942, pp
437-446.

SLA R-2286

Sci

Aug 58

72,193

Kinetics of Reduction of Cu^{++} To Cu^{+} by Carbon
Monoxide, in Ammoniacal Solutions, by E. I.
Dontsova, UNCLASSIFIED

RUSSIAN, per, Zhur Prii Khim, Vol. 15, 1942,
pp 447-452.

Assoc Tech Ser, RJ-80
Price: \$9.50 (\$1.20)

Scientific - Chemistry

18,095
R-2267
SLA R-2094

V
Succinic Acid and Its Ethyl Esters, by I. Kh.
Fel'dman, E. S. Troyanova, 8 pp.

RUSSIAN, per, Zhurnal Prikladnoi Khimii, Vol
XVI, No 1, 2, 1943, pp 15-19.

Sci Tr Center RT 36 03

36,152

Chemistry

Jun 56 CTS

Preparation of Hydrophobic Cellulose, Part I., by D. N. Kursanov, V. N. Setkina, 2 pp.

RUSSIAN, per. Zhur Prik Khim, Vol XVI, 1943, pp 36-45.

CIA/FDD/X-1325

Scientific - Chemistry

ET DEX

14,087

Kazakov, E. I., Edel'shtein, N. G., and Chegls, A. P.
CHEMICO-TECHNOLOGICAL INVESTIGATION OF BITUMINOUS SHALES OF THE MANTUROV FIELD
[1961] 5p. 2 refs.

Order from OTS or SLA \$1.10

61-16957

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1943, v. 16, p. 72-77.

DESCRIPTORS: Fuels, *Shales, *Bitumens, Gasoline, Sulfur, Chemical analysis, USSR.

Three samples of shale from the Usol'e section of the Manturov deposit (Gor'ki and Ivanovo regions on the Volga) have been investigated. The first sample contains 44% ash and has a calorific value of over 4,000 cal. The yield and composition of primary tar are advantageous for its use as fuel and make it a suitable material for preparation of motor fuel. Shales from (Materials--Fuels, TT, v. 6, no. 10) (over)

61-16957

I. Kazakov, E. I.
II. Edel'shtein, N. G.
III. Chegls, A. P.

61-16957

Office of Technical Services

Common Salt as Catalyst in Silicate-Forming
Reactions in the Solid Phase, by L. M. Blyumskii.

RUSSIAN, pub., Zhur Prikl. Khim., Vol XVI, 1943, p. 84.

DSIR RLL N. 1225

Sci - Chem

Oct 61

171,701

Simonova, L. K.
DETERMINATION OF THERMAL CONSTANTS OF
ACTIVATED CARBON AND SILICA GEL. [1961] 5p.
7 refs.

Order from OTS or SLA \$1.10

61-16958

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1943, v. 16, p. 87-94.

DESCRIPTORS: *Gels, *Silicon compounds,
*Activated carbon, Colloids, Conductivity, Tempera-
ture, *Heat transfer, Calorimeters.

The heat capacities, thermal conductivities and tem-
perature conductivities of three samples of activated
fruit pit carbon and of one sample of silica gel were
determined at 0, 20 and 70°. The temperature con-
ductivity of powdered samples increases over that of
granulated samples at the average by 11.1%; the corre-
sponding increase in the thermal conductivity is 35.9%,
(Physics--Thermodynamics, TT, v. 6, no. 9) (over)

61-16958

I. Simonova, L. K.

185414

Office of Technical Services

Synthesis of Vitamin B₁, by A. I. Gerasim, 21 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XVI, ^{No 34} 1943, pp 105-117.

AEC-MP-tr-1052

Sci-Chem
Jan 64

ALL (Lean) Ref: 58224 1963 (10, 11, 12)

248,347

Pesin, L. M., Belyanina, E. T., and
Pavlovskaya, V. A.

HYDRATION OF CAMPHENE TO ISOBORNEOL.

1961¹ Sp. 11 refs.

Order from OTS or SLA \$1.10

61-16985

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1943, v. 16, p. 129-133.

DESCRIPTORS: *Sulfonic acids, *Camphene, Hy-
drates, *Camphanes.

Hydration of camphene in acid medium was investi-
gated in the presence of refined Petrov's kontakt
[mixture of sulfonic acids]. An 80% yield of a crystal-
line product was obtained containing over 60% iso-
borneol and about 40% camphene. (Author)

(Chemistry--Organic, TT, v. 8, no. 10)

61-16985

I. Pesin, L. M.
II. Belyanina, E. T.
III. Pavlovskaya, V. A.

Office of Technical Services

Mamedli, M. G.
SYNTHETIC OILS FROM CRACKED DISTILLATES.
[1961] 8p. 11 refs.
Order from OTS or SLA \$1.10 61-16984

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943, v. 16,
p. 143-150.

DESCRIPTORS: *Lubrication, *Oils, *Waxes, Decom-
position.

The best lubricating oils, satisfying the requirements
for aviation oils with respect to viscosity index, oxida-
tion stability, low pour point and low specific gravity,
as well as high flash point, are obtained from products
of cracking paraffin wax. Polymerization of cracked
distillates to synthetic lubricating oils in the presence
of aluminum chloride takes place not only at low tem-
peratures 125-130°. The qualitative and quantitative
characteristics are identical in both cases. At the
(Chemistry--Organic, 77, v. 6, no. 8) (over)

61-16984

I. Mamedli, M. G.

3 6120

Office of Technical Services

Oxidation of Nicotine to ~~Nicotin~~ Nicotinic Acid,
by N. A. Vagyunina et al, UNCLASSIFIED

RUSSIAN, per, Zhur Prii Khim, Vol XVI, No 5-6,
1943, pp 206-210.

Assoc Tech Ser
6872R

Price: \$10.00 (\$1.25)

Scientific - Chemistry

18,098

Sumarokov, V. P., Rylkin, S. S., and
Bogoyavlenskaya, V. N.

PREPARATION OF PYROCATECHOL BY DECOMPO-
SITION OF PHENOL ETHERS OF WOOD CREOSOTE
UNDER ATMOSPHERIC PRESSURE, I. [1961] 8p.
9 refs.

Order from OTS or SLA \$1.10

61-18169

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943,
v. 16, p. 219-226.

DESCRIPTORS: *Pyrocatechol, Ethers, *Wood, Creosote
Synthesis.

Experiments of preparation of pyrocatechol from two
samples of creosote with the aid of aniline hydrochlo-
ride are reported, in which it was established that: (1)
practically complete decomposition of the phenol ethers
of creosote may be achieved by this method; (2) the re-
action requires more time than the action of hydro-
(Chemistry--Organic, TF, v. 6, no. 6) (over)

61-18169

I. Sumarokov, V. P.
II. Rylkin, S. S.
III. Bogoyavlenskaya, V. N.

176601

Office of Technical Services

Ferrous Trisulfide, by S. V. Lipin, 22 pp.

RUSSIAN, per, Zhur Prik Khim, # Vol XVI, No 7-8,
1943, pp 258-269.

CIA/FDD X-2794

Sci - Chem
Mar 58

VII M. 1943

60,686

Esafov, V. I.

QUALITATIVE ANALYSIS OF DIENE HYDROCARBONS WITH CONJUGATED DOUBLE BONDS, III. [1961] 10p. 8 refs.

Order from OTS or SLA \$1.10

61-16911

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943, v. 16, p. 283-294.

DESCRIPTORS: Iodine, *Hydrocarbons, *Molecular structure, Chemical reactions, *Ethylenes, Halogenation.

Bromination in carbon tetrachloride was shown by precise data to be a specific reaction only for those diene hydrocarbons, the molecules of which possess one, or still better, two side chains attached to the carbon atoms of the conjugated system. In the last mentioned case the reaction is accompanied by evolution of considerable amounts of hydrogen bromide and con- (Chemistry--Physical, TT, v. 6, no. 8) (over)

61-16911

I. Esafov, V. I.

185124

Office of Technical Services

ZHURNAL Prikl KHIM ~~Book~~

Vol 16, No 7-8 (1943)

pp 325-327

Department of Research Programmes & Planning
Admiralty

The Use of Cupferron in Qualitative Chemical
Analysis, by P. M. Isakov

ACSIL Trans No. 387 (*British*)

File No U-625/49 in

FDD Lib

Kurssanov, D. N. and Solodkov, P. A.
NEW METHOD OF OBTAINING COLORED DERIVATIVES OF CELLULOSE. [1943] 9p. (conclusions illus. omitted).
Order from OTS or SLA \$1.10 61-14012
.. ATS 48.25 (5pp) ATS-74872R
Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943, v. 16, no. 11/12, p. 351-355

DESCRIPTORS: Cellulose chemistry, *Cotton cellulose, *Synthetic fibers, Text, Colors, *Ammonium radicals, *Exchange reactions, *Pigments

61-14012

I. Kurssanov, D. N. .
II. Solodkov, P. A.

184013

Office of Technical Services

(U.S. Government)

Andreev, E. A., Avramenko, V. I. and others.
PREPARATION OF ALDEHYDES BY OXIDATION OF
BY-PRODUCTS OF SYNTHETIC RUBBER MANU-
FACTURE. I. COOL FLAME OXIDATION OF SK
MOTOR FUEL. [1961] 9p. 7 refs.
Order from OTS or SLA \$1.10

61-16894

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1943, v. 16,
p. 356-364.

DESCRIPTORS: *Synthetic rubber, Oxidation, *Alde-
hydes, Hydrocarbons, Flames, Fuels, Fungicides.

Optimal temperature conditions were established for
operation of a semi-plant scale unit for low temperature
oxidation of hydrocarbons obtained as by-products of
the production of 1, 3-butadiene from ethyl alcohol (SK
Motor Fuel). In the vaporizer and air preheater, a tem-
perature of 200° is to be maintained, and in the reac-
tor a temperature of from 400 to 420°. Up to 96% of

(Chemistry--Physical, TT, v. 6, no. 8)

(over)

61-16894

- I. Andreev, E. A.
- II. Avramenko, V. I.
- III. Title: Cool...

125119

Office of Technical Services

Stability and Volatility of Tin Oxides, by V. K.
Veselovskiy, 29 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XVI, 1943,
pp 397-416. 9093512

AEC UCRL Tr-821(1)

Sci - Chem
Jul 62

204, 688

Structure and Germicidal Properties of Organic Compounds. Communication I. Derivatives of Hydroxydiphenyl, by N. N. Mel'nikov, N. S. Rokitskaya, Z. E. Bekker, 12 pp.

RUSSIAN, no per, Zhur Prik Khim, Vol XVI, No 9-10, 1943, pp 426-432.

36,111
Sci Tr Center RT-3602

Scientific - Chemistry

Jun 56/dex

Resistance of Gas-Chromized Carbon Steel to Corrosion by Sulphur-containing Media, by V. Y. Arkharov, and other.

RUSSIAN, per, Zhur Prik Khim, Vol XVI, Nos 11, 12, 1943.

Brutcher Tr 1725

Chemistry
Scientific - ~~XXXXXXXX~~

\$4.95

12,848

Combined Solubility of Li_2CO_3 with Na or
K Carbonate in Water, by G. G. Urazov and
Z. I. Lifatova, 7 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII,
1944, pp 16-21.

SLA R-2434

Sci

Aug 58

72,143

Ushakov, S. N. and Matuzov, N. A.
COPOLYMERIZATION OF CHLOROSTYRENES WITH
STYRENE AND WITH METHYL METHACRYLATE.
[1961] 6p. 3 refs.

Order from OTS or SLA \$1.10

61-16904

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 172] p. 52-59.

DESCRIPTORS: *Copolymerization, *Styrenes,
Chlorides, *Acrylic resins, Chemical reactions.

The velocity of copolymerization of chlorostyrenes
with styrene and with methyl methacrylate depends
upon the proportions of the reactants. The higher is
the content of the monomer in the reaction mixture,
which is characterized by a higher velocity of poly-
merization, the greater is the velocity of copolymeri-
zation. In copolymerization of p-chlorostyrene with
styrene the reaction velocity increases in proportion to
(Chemistry--Organic, TT, v. 6, no. 8) (over)

61-16904

I. Ushakov, S. N.
II. Matuzov, N. A.

135122

Office of Technical Services

Lel'chuk, S. L., Balandin, A. A. and others.
DEHYDROGENATION OF ETHYL ALCOHOL OVER
MIXED CATALYSTS. [1961] 5p. 8 refs.
Order from OTS or SLA \$1.10

61-16907

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 1/2] p. 60-64.

DESCRIPTORS: Dehydrogenation, *Catalysts,
*Ethanol, Esters, Esterification, Chemical reactions,
Ethyl radicals, Acetates, Acetic acids, Titanium
compounds, Oxides.

Dehydrogenation of ethanol was studied, leading to for-
mation of substantial amounts of acetic acid and ethyl
acetate. Three-component catalysts were investigated
for this reaction, consisting of copper and alumina pro-
moted with oxides of cadmium or titanium. The cata-
lyst promoted with cadmium oxide has no advantages
over the two-component catalyst, consisting of copper
(Chemistry--Organic, TT, v. 6, no. 8) (over)

61-16907

I. Lel'chuk, S. L.
II. Balandin, A. A.

185123

Office of Technical Services

Microcolorimetric Determination of Vanadium in
Rocks, Minerals, and Ores by Means of Benzidine.
by I. P. Alimerin, 12 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII, 1944,
p 83-93.

SLA R-3099

Sci

Jul 59

91,393

Yakubchik, A. I., Vasil'ev, A. A. and others.
CHEMICAL CHARACTERISTICS OF BUTADIENE
RUBBERS BASED ON DETERMINATION OF FORMIC
ACID AND FORMALDEHYDE IN THE PRODUCTS OF
DECOMPOSITION OF THEIR OZONIDES. [1961] 6p.
33 refs.

Order from OTS or SLA \$1.10

61-16908

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944, v. 17
[no. 1/2] p. 107-113.

DESCRIPTORS: *Rubber, Decomposition, Ozonides,
Butadienes, Formaldehyde, *Synthetic rubber, Formic
acids.

A rapid method of classification of butadiene polymers
and their copolymers, for instance with styrene, was
developed, based on correlation of the properties of the
rubber with the number of vinyl linkages in the rubber
molecule indicated by ozonization. Data for 14 types of
(Materials--Rubber, TT, v. 6, no. 9)

61-16908

I. Yakubchik, A. I.
II. Vasil'ev, A. A.

165404

Office of Technical Services

Ushakov, S. N., Lavrent'eva, E. M. and others.
POLYVINYL ACETAL COATINGS FOR MAKING
CONCRETE IMPERMEABLE TO GASOLINE. (1962)
9p. 17 refs.

Order from OTS or SLA \$1.10

62-14612

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 1/2] p. 125-136.

DESCRIPTORS: *Gasoline, Permeability, *Concrete,
Coatings, *Acetals, Polymers, *Vinyl radicals,
*Plastic coatings.

The mechanical strength, swelling, permeability to
water and gasoline were determined of films of poly-
vinyl acetate and polyvinyl acetals, free and in the form
of coatings on concrete. The dependence of the proper-
ties of the coatings upon the extent of polymerization
and the nature of the substituent in the acetal of poly-
vinyl alcohol, as well as upon the extent of plastifica-
(Chemistry--Physical, TT, v. 9, no. 1) (over)

62-14612

I. Ushakov, S. N.
II. Lavrent'eva, E. M.

Office of Technical Services

Suvorovskaya, N. A.
DETERMINATION OF IRON IN ALUMINATE
SOLUTIONS BY A POLAROGRAPHIC METHOD, tr. by
Ingeborg V. Baker and George N. Kaschko. 4 Jan 63.
6p. 6 refs. [AMC] (Redstone) Trans-no. 1-63.
Order from OTS or SLA \$1.10 63-15134

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17, no. 3, p. 156-158.

DESCRIPTORS: *Aluminates, Solutions, *Iron,
*Polarographic analysis, Iron compounds, Sulfides,
Complex compounds.

This work demonstrates the practicability of using the
polarographic method of analysis for determination of
iron in aluminate solutions. The iron is precipitated in
the form of sulfide, dissolved in hydrochloric acid, and
reduced by sulfur dioxide during boiling of the solution
(Chemistry--Analytical, TT, v. 10, no. 2) (over)

63-15134

- I. Suvorovskaya, N. A.
- II. AMC(Redstone) Trans-1-63
- III. Army Missile Command,
Redstone Arsenal, Ala.

Office of Technical Services

Determination of Phosphorus in Limestones
by Titration of Excess 8-Hydroxyquinoline,
by P. O. Pudnikov and S. S. Zhukovskaya,
7 pp. *VR*

RUSSIAN, per, Zhur Prii Khim, Vol XVII, 1944,
pp 165-169.

SLA R-2541

Sci

Aug 58

72,803

19
Action of Na_2SO_4 on the Decomposition of
Spodumene of Fusion with K_2SO_4 , by G. P.
Aleksandrov, 6 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII,
1944, pp 183-187.

SIA R-2435.

Sci

Aug 58

72,118

The Reduction of Germanium Compounds at the Dropping
Mercury Electrode., by I. P. Alimarin, D. N. Ivanov-gmin,
(P. O.)
RUSSIAN, per, Zhurnal Prikl Khim, Vol XVII, p. 204, 1944

Sci Mag, Lib 53/266E

5

Sci - Chemistry
CIS/DEK

10,432

Pakshver, A. and Zlatoustovskaya, A.
OXIDATION OF AMMONIA IN SOLUTIONS OF COM-
PLEX CUPRAMMONIUM COMPOUNDS. [1961] [9]p.
7 refs. T/L 724: [DSIR LLJ] M 2066.
Order from LC or SLA mi\$1.80, ph\$1.80 61-13423

Trans. of Zhurnal Prikladnoy Khimii (USSR) 1944,
v. 17, p. 259-265

Sci Mus 30 52/2726

(Chemistry--Inorganic, TT, v. 5, no. 12)

61-13423

1. Ammonia--Oxidation
 2. Complex compounds--
Chemical reactions
 3. Copper compounds--
Chemical reactions
 4. Cellulose--Oxidation
- I. Pakshver, A.
 - II. Zlatoustovskaya, A.
 - III. Trans-T/L-724
 - IV. DSIR LLJ M.2066

166597

Office of Technical Services

Pakshver, A. and Zlatoustovskaya, A.
THE OXIDATION OF AMMONIA IN SOLUTIONS OF
COMPLEX CUPRAMMONIUM COMPOUNDS. [1964] 12p
Srefs

Order from OTS, SLA, or ETC \$1.60 TT-64-10771

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944, v. 17,
no. 4/5, p. 259-265.

Another trans. is available from LC or SLA mi\$1.80,
pi\$1.80 as TT-61-13423 [1961] [9p].

(Chemistry--Inorganic, TT, v. 11, no. 12)

TT-64-10771

I. Pakshver, A.
II. Zlatoustovskaya, A.

Office of Technical Services

Rapid Method for the Analysis of NH_4NO_2 in Hydrated Form, by V. G. Vasil'ev, 10 pp.

RUSSIAN, per, Zhur Prii Khim, Vol XVII, 1944, pp 266-273.

SLA R-2436

Sci

Aug 58

72,116

Amelin, A. G.

SULPHURIC ANHYDRIDE ABSORPTION WITH WATER
SULPHURIC ACID SOLUTIONS (Absorbtsiya Sernogo
Angidrida Vodnymi Rastvorami Sernoi Kisloty). 17p.
(foreign text included) 7 refs. DTC-1.
Order from OTS, ETC or DTC \$1.30 62-28788

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 6] p. 319-325.

DESCRIPTORS: *Sulfuric acid, *Anhydrides,
*Absorption, Solutions, Experimental data.

(Chemistry--Physical, TT, v. 10, no. 2)

62-28788

- I. Amelin, A. G.
- II. DTC-1
- III. Danish Translations
Centre, Roskilde

Office of Technical Services

Complex Treatment of Apatite, with Hydro-
chloric Acid, by S. I. Volfkovich and A.
Loginova, 17 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII, 1944,
pp 381-393.

SLA R-2149
OXS 63-14640

Sci

Aug 58

72, 154

Improvement in the Manufacture of Sodium
Fluosilicate 11. Solubility of Sodium
Fluosilicate, by K. E. Kleiner, 10 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII,
1944, pp 409-416.

SLA R-2152 also 63-14616

Sci

Aug 58

72,428

Polymerization of Chlorostyrenes, ^{com 1} by S. N. Ushakov, et
P. A. Matuzov, 16 pp UNCLASSIFIED

RUSSIAN, per, Zhur Prikl Khim, Vol XVII, No ~~620~~, 7/8
1944, pp ~~435-444~~ 435-444

Sci Tr Center
RE-1017

Scientific - Chemistry

15,348

Drinberg, A. Ya. and Krechkov, P. P.
RESINS AND VARNISHES FROM SUBSTITUTED PHE-
NOLS OBTAINABLE FROM PEAT TAR. [1961] 5p.
15 refs.

Order from OTS or SLA \$1.10

61-18218

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944, v. 17,
p. 458-462.

DESCRIPTORS: *Resins, Varnishes, Phenols, Peat,
Substitution reactions.

The possibility was demonstrated of preparing a resin
and a varnish of quality not lower than that prepared
from pure alkyl phenols, using widely differing alky-
lated phenols from peat. Addition of about 30% of a
mixture of cresols to tertiary butylphenol lowers the
quality of the varnish obtained. (Author)

(Materials--Finishes, TT, v. 6, no. 8)

61-18218

L. Drinberg, A. Ya.
IL. Krechkov, P. P.

185138

Office of Technical Services

Kmelevskii, V. I. and Postovskii, I. Ya.
METHOD OF INVESTIGATION AND ANALYSIS OF
COMPOUNDS OF CRUDE ANTHRACENE AND
OTHER HIGH-BOILING FRACTIONS OF COAL TAR.
Rept. 10 on Polycyclic Hydrocarbons. [1961] 13p.
(1 fig. omitted) 24 refs.
Order from OTS or SLA \$1.60

61-20929

Trans. of [Zhurnal Prikladnoi Khimii] (USSR) 1944,
v. 17, p. 463-470.

DESCRIPTORS: *Hydrocarbons, *Anthracenes, *Coal
tar, Boiling, Fractionation.

(Chemistry--Organic, TT, v. 7, no. 9)

61-20929

I. Kmelevskii, V. I.
II. Postovskii, I. Ya.
III. Title: Polycyclic...

Office of Technical Services

62-14157

JOURNAL OF APPLIED CHEMISTRY, 1944, VOL. 17,
NO. 9/10: [TABLE OF CONTENTS AND SELECTED
ABSTRACTS]. [1961] 6p. 11 refs.

Order from OTS or SLA \$1. 10

62-14157

Abstract trans. of Zhurnal Prikladnoi Khimii (USSR)
1944, v. 17, no. 9/10, p. 487-494, 527-528.

##533-537, ##552-556.

##Complete translations are available separately.

DESCRIPTORS: *Chemistry, Literature, Abstracting,
Carbon, Adsorbents, Organic solvents, Vapors,
Adsorption, *Chlorides, *Allyl radicals, Pressure,
*Explosives, *Combustion, Detonation waves, Pro-
duction, Pyrocatechol, Synthesis, *Creosote,
*Phenols, Ethers, Decomposition, Activated carbon.

(Chemistry. T.T. v. 8, no. 4)

(over)

Office of Technical Services

1. Title: Sorption...

Sulfate Nitrophoska 1. IV. Polytherm of the Ternary System: Ammonium Sulfate, Water, Ammonium Monophosphate, by P. V. Bel'chev, A. G. Bergman, 9 pp.

RUSSIAN, per, Zhur Prikl Khim, Vol XVII, 1944, pp 520-526.

ORS 60-18075
SLA R-3356

Sci

Aug 59

93,578

The Problem of the Mechanism of Transition from
Burning to Detonation of Explosive Materials, by
K. K. Andreyev.

RUSSIAN, no per, Zhur Prikl Khim, Vol XVII,
No 9/10, 1944, pp 533-537.

T.I.L. 2.4681

Sci - Chemistry

36,926

Aug 1956

Polymerization of Chlorostyrenes, ^{ROMIL} by S. N. Ushakov,
P. A. Matuzov, 15 pp UNCLASSIFIED

RUSSIAN, per, Zhur ^{PRK} Khim, Vol ^{XVII} ^{No 9/10}
~~1944~~, pp ~~448-450~~, ~~1944~~, ~~1944~~

1944 538-545

Sci Tr Center
RT-1018

Scientific - Chemistry

15,349

Conditions of Formation of Manganese Coatings
and Some of Their Properties, by K. Gorbunova.

RUSSIAN, per, Zhur Prik Khim, Vol XVII,
1944, pp 581-587.

CSIRO

Sci - Chem
Aug 62

207,418

Globus, R. L. and Mozhchinskaya, N. K.
RESEARCH ON DIPHENYLMETHANE AND ITS DE-
RIVATIVES. III. DESTRUCTIVE HYDROGENATION
OF DIPHENYLMETHANE. [1961] (p. 11 refs.)
Order from OTS or SLA \$1.10 (1-18347

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 11/12] p. 123-127.

DESCRIPTORS: *Diphenylmethane, Hydrogenation,
Pressure, Decomposition, *Benzene, *Toluene,
Synthesis, Catalysts, Catalysts, Methane, Phenyl
radicals

Destructive hydrogenation of diphenylmethane under
atmospheric pressure and under 100 atm. hydrogen
pressure was studied. It was established that diphenyl-
methane can completely decompose to benzene and
toluene: $C_6H_5CH_2C_6H_5 + H_2 \rightarrow C_6H_6 + C_6H_5CH_3$.
(Author) (See also 60-13878)

61-18347

I. Globus, R. L.
II. Mozhchinskaya, N. K.
III. Title: Destructive...

(Chemistry--Organic, TT, v. 6,
no. 10)

Office of Technical Services

Sumarokov, V. P., Rykin, S. S., and Kurmileva,
E. E.

PREPARATION OF PYROCATECHOL BY DECOM-
POSITION OF PHENOL ETHERS OF WOOD CREO-
SOTE UNDER ATMOSPHERIC PRESSURE, II. [1961]
5p. 13 refs.

Order from ODS or SLA \$1.10

61-18215

Trans. of *Zhurnal Prikladnoi Khimii* (USSR) 1944,
v. 17, p. 552-556

DESCRIPTORS: *Pyrocatechol, Ethers, Wood, Creosote, Synthesis

Experiments are reported of preparation of pyro-
catechol from creosote by the action of aluminum chlo-
ride under atmospheric pressure. It was found that a
practically complete decomposition of the phenol ethers
is possible, using approximately equimolecular amounts
of ether and aluminum chloride. This reaction is much
(Chemistry--Organic, TT, v. 6, no. 7) (over)

61-18215

I. Sumarokov, V. P.
II. Rykin, S. S.
III. Kurmileva, E. E.

18215

Office of Technical Services

Crystallization, Viscosity, Density
and Mutual Solubility of Some Solutions
of the System $\text{LiCl-H}_2\text{O-}n\text{-C}_3\text{H}_7\text{OH}$, by V. T.
Slavyanskii, 8 pp.

RUSSIAN; per, Zhurnal Prikladnoi Khimii,
Vol. 17, 1944, pp 570-575.

TC-399

336,223

Sci
Aug 67

Platé, A. F. and Tarasova, G. A.

PREPARATION OF p-CYMENE FROM SULFATE

TURPENTINE. [1961] 5p. 15 refs.

Order from OTS or SLA \$1.10

61-18232

61-18232

I. Platé, A. F.

II. Tarasova, G. A.

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17, p. 576-579.

DESCRIPTORS: *Cymenes, Catalysts, Toluenes,
*Turpentine, *Sulfate pulp, Chemical analysis.

Conversions of sulfate turpentine were investigated at 380-520° in the presence of mixed catalysts containing chromic oxide of molybdenum oxide carried on alumina and also in the presence of a synthetic aluminosilicate. In the presence of the first two of these catalysts a yield of the cymene fraction was obtained at 400° reaching 60% on the turpentine or 77% when calculated on α -pinene and Δ^2 -carene contained in the (Engineering-Chemical, IT, v. 6, no. 12) (over)

Office of Technical Services

Dicaine, A Local Anesthetic, by I. Kh. Fel'dman,
E. L. Kopeliovich, 12 pp.

RUSSIAN, per, Zhurnal Prikladnoi Khimii, Vol XVII,
Nos 11, 12, ~~XXX~~ 1944, pp 588-593.

Sci Trans Center RT-3406

Scientific - Chemistry, *Medicine*

32,718

Apr 56

Zhur Prik Khim Vol 17, 1944 pp 594-598

Bismuth Electroplating, by A. I. Lewin

AEC Trans

Bismuth Electroplating, by A. Levin, 15 pp.

RUSSIAN, per, Zhur Prik Khim, Vol XVII, 1944, pp
613-618.

SLA R-2781

Sci

Jul 59

92, 415

GORSUNOV, N. S.

Zhurnal Prikladnoi Khimii, vol. 17, Nos. 9-10, 9
figures, 6 tables, 2500 words; 1944.

Chromized Layers on Iron and Steel.

Brutcher Trans, Order No. 1806, \$3.75.

Moshchinakaya, N. K.

RESEARCH ON DIPHENYLMETHANE AND ITS
DERIVATIVES. IV. DESTRUCTIVE HYDROGENA-
TION OF HIGH MOLECULAR PRODUCTS OF CON-
DENSATION OF BENZENE WITH FORMALDEHYDE.

[1961] 4p. 13 refs.

Order from OTS or SLA \$1.10

61-18346

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1944,
v. 17 [no. 11/12] p. 629-633.

DESCRIPTORS: *Diphenylmethane, Hydrogenation,
Decomposition, Pressure, *Benzene, *Toluene,
Synthesis, Catalysts, Catalysis, *Formaldehyde,
Condensation reactions, Methane, Phenyl radicals

Destructive hydrogenation of mixtures of diphenyl-
methane with p- and o-dibenzylbenzene and higher
molecular compounds under 100 atm pressure at 500°
Chemistry--Organic, TT, v. 6, no. 11) (over)

61-18346

1. Moshchinakaya, N. K.

II. Title: Destructive...

Office of Technical Services

Bashkirov, A. N. and Karavaev, N. M.
A NEW METHOD OF ISOLATION OF STYRENE
FROM CRUDE BENZOL. [1961] 6p. 24 refs.
Order from OTS or SLA \$1.10 61-18188

Condensed trans. of Akademiya Nauk SSSR. Otdelenie
Khimicheskikh Nauk. Izvestiya 1944, p. 763-772.

DESCRIPTORS: *Styrenes, Separation, Chlorination,
Chlorides, Benzene.

A method of isolation of styrene is proposed, which is
said to have passed the laboratory stage of study. It
consists in treating the fraction 135-150° of crude
benzol with a 15 per cent solution of sodium hydroxide
and then with 5 per cent sulfuric acid. The product, free
of phenols and basic compounds, is then chlorinated,
and since dichlorostyrene boils at 233-234°, it can
easily be separated from the xylenes by distillation,
after which dichlorostyrene is dechlorinated at 175°
with hog iron ore, reduced at 500-550° with hydrogen
or other reducing gases. The yield of dichlorostyrene
(Chemistry--Organic, TT, v. 6, no. 6) (over)

61-18188

I. Bashkirov, A. N.
II. Karavaev, N. M.

176606

Office of Technical Services

Sumarokov, V. P. and Bogoyavlenskaya, V. N.
PREPARATION OF PYROCATECHOL FROM WOOD
CREOSOTE BY DECOMPOSITION OF PHENOL
ETHERS UNDER ATMOSPHERIC PRESSURE, III.
[1961] 4p. 3 refs.
Order from OTS or SLA \$1.10 61-18345

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1944, v. 17 [no. 11/12] p. 650-655.

DESCRIPTORS: *Pyrocatechol, Preparation, *Creosote,
*Phenols, *Ethers, Decomposition, *Hydrochloric
acids, Chemical reactions, Temperature, Velocity,
*Anilines.

The dependence of the velocity of decomposition of poly-
hydric phenols upon the temperature, the amount of
aniline used and the rate of flow of hydrogen chloride
forming the aniline salt was studied. A rise of the tem-
(Chemistry--Organic, TT, v. 6, no. 10) (over)

61-18345

I. Sumarokov, V. P.
II. Bogoyavlenskaya, V. N.

187255

Office of Technical Services

Purification of Xylose-Containing Solutions with Calcium Oxides, by N. A. Sychev and M. I. Shmatova, 4 pp.

RUSSIAN, per, Zhur Prii Khim, Vol XXII, 1944, pp ~~381-393~~.

655-658.

SLA R-216 72

Sci

Aug 58

72,153

Catalytic Oxidation of Phenanthrene. I. Effect of Various Factors on the Catalytic Oxidation of Phenanthrene, by W. N. Vorozhtsev, D. A. Gurevich, 7 pp.

RUSSIAN, no per, Zhur Prik Khim, Vol XVIII, No 1/2, 1945, pp 3-9.

SLA 62-10048

Sci Tr Ctr RT-3438

Scientific - Chemistry

34,918

May 56 CTS/dex

Vorozhtsev, N. N. and Gurevich, D. A.
CATALYTIC OXIDATION OF PHENANTHRENE.
II. MECHANISM OF ACTION OF VANADIUM PENT-
OXIDE [Zuchenie Kataliticheskogo Okisleniya Penan-
trema, II]. [1961] 4p. 2 refs.
Order from OTS or SLA \$1.10

61-18223

Condensed trans. of Zhurnal Prikladnoi Khimii (USSR)
1945, v. 18 [no. 1/2] p. 10-14.

DESCRIPTORS: Oxidation *Phenanthrenes, Catalysts,
*Vanadium compounds, Oxides, Vapor phase, Crystals,
Naphthalenes.

Observations of the process of oxidation of hydrocarbons
over vanadium pentoxide were correlated with a study
of microphotographs of the surface of samples of the
catalyst. It was established that vanadium pentoxide
interacts with the charge and this results in essential
changes of its surface involving reduction to the tri-

(Chemistry--Physical, TT, v. 6, no. 8) (over)

61-18223

- I. Vorozhtsev, N. N.
- II. Gurevich, D. A.
- III. Title: Mechanism...

185139

Office of Technical Services

Lozovoi, A. V. and Senyavin, S. A.
VELOCITIES OF DECOMPOSITION OF HYDROCAR-
BONS IN DESTRUCTIVE HYDROGENATION. II.
ANTHRACENE, 9,10-DIHYDROANTHRACENE, SYM-
METRICAL OCTAHYDROANTHRACENE, PERHYDRO-
ANTHRACENE, PHENANTHRENE AND 1,2-BENZAN-
THRACENE. [1961] 7p. 30 refs.
Order from OTS or SLA \$1.10

61-18224

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945,
v. 18 [no. 1/2] p. 35-42.

DESCRIPTORS: *Hydrocarbons, Decomposition,
*Hydrogenation, *Anthracenes, Catalysts,
*Phenanthrenes.

Hydrogenation of 6 fused ring polynuclear aromatic and
hydroaromatic hydrocarbons was studied under an
initial hydrogen pressure of 80 atm. at 380, 420 and
475° in the presence of 5% molybdenum sulfide, and the
(Chemistry--Organic, TT, v. 6, no. 8) (over)

61-18224

I. Lozovoi, A. V.
II. Senyavin, S. A.
III. Title: Anthracene...

110140

Office of Technical Services

Decomposition Rates of Hydrocarbons in Destructive
Hydrogenation. Part III, by A. V. Lozovoi, S. A.
Seryugin,

RUSSIAN, for, ~~Chem~~ Priklad Khim, Vol XVIII, No 1-2,
1945, pp 43-49.

ATS RJ-2097

Sci - Chem

May 60

115,391

Mamedli, M. G.

CATALYTIC DESULFURIZATION OF GASOLINE, I.
[1961] 5p. 22 refs.

Order from OTS or SLA \$1.10

61-18242

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945, v. 18
[no. 1/2] p. 62-66.

DESCRIPTORS: Catalysts, Gasoline, Sulfur compounds,
Fuels, Clays, Hydrocarbons, Decomposition, Separation.

A study of the suitability of 12 samples of clays from four regions on the Apsheron peninsula in USSR for catalytic desulfurization of gasoline showed that some natural clays can be used without activation for this process, effecting removal of up to 88% of the sulfur from samples with an initial sulfur content of 0.059% at 400°C. However, at this temperature partial cracking may occur and the optimal conditions are thought (Materials--Fuels, TT, v. 6, no. 8) (over)

61-18242

1. Title: Desulfurization
1. Mamedli, M. G.

155143

Office of Technical Services

On Effectiveness of Oxygenated Air Application in
the Contact Nitric Acid Manufacture, by V. I.
Atreshchenko, 9 pp.

RUSSIAN, per, Zhur Prikl. Khim., Vol XVIII, Nos 1, 2,
1945, pp 81-85.

26, 7/5

Sci Trans Center
RT 2350

Scientific - Chemistry

Sep 55 CTS/DEX

Grinevich, V. M.
A STUDY OF ZINC-CHROMIUM CATALYSTS FOR
SYNTHESIS OF METHANOL. [1961] 5p. 3 refs.
Order from OTS or SLA \$1.10 61-18348

Trans. of Zhurnal Prikladnoi Khimii (USSR) 1945, v. 18,
p. 90-96.

DESCRIPTORS: *Methanols, Synthesis, *Zinc compounds,
*Chromium compounds, *Oxides, Catalysts, Catalysis.

The efficiency of the catalyst for synthesis of methanol
of the composition $8\text{ZnO} \cdot \text{Cr}_2\text{O}_3 \cdot \text{CrO}_3$ is raised by
about 40% by substituting chromium oxide by chromium
trioxide, without affecting the composition of the pro-
duct. The catalysts $8\text{ZnO} \cdot 3\text{CrO}_3$ and $2\text{ZnO} \cdot \text{CrO}_3$ are
identical in activity. An increase of their content of
chromium to a composition of $\text{ZnO} \cdot \text{CrO}_3$ reduces the
efficiency of the catalyst by 60% when the latter is pre-
(Chemistry--Organic, TT, v. 6, no. 10) (over)

61-18348

I. Grinevich, V. M.

1257

Office of Technical Services